

What is Claimed is:

10. (New) A process for the hydrogenation of an aromatic compound, wherein said aromatic compound is an aliphatic-substituted aromatic or a heteroaromatic compound having an asymmetrical carbon atom, comprising hydrogenating said aromatic compound in the presence of a platinum-rhodium mixed catalyst.
11. (New) The process of claim 10, wherein said aromatic compound is an amino acid or an aromatic-substituted amino alcohol.
12. (New) The process of claim 10, wherein the ratio of platinum to rhodium in said platinum-rhodium mixed catalyst is between 20:1 and 1:1 (w/w).
13. (New) The process of claim 10, wherein said platinum-rhodium mixed catalyst is used in a quantity of 0.1 to 20 wt%, relative to the compound undergoing hydrogenation.
14. (New) The process of claim 10, wherein said platinum-rhodium mixed catalyst is adsorbed on a support.
- 25 15. (New) The process of claim 10, wherein said hydrogenation is performed in the presence of a solvent selected from the group consisting of: water; an alcohol; an ether; and mixtures thereof.
- 30 16. (New) The process of claim 10, wherein said hydrogenation is performed under hydrogen pressures of between 1 and 100 bar.

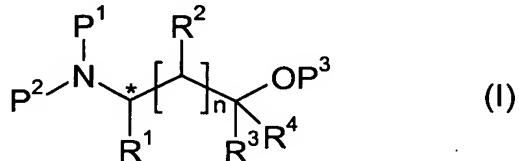
17. (New) The process of claim 10, wherein said hydrogenation is performed at a temperature of 10°C to 150°C.

5 18. (New) The process of claim 10, wherein:

- a) said aromatic compound is an amino acid or an aromatic-substituted amino alcohol;
- b) the ratio of platinum to rhodium in said platinum-rhodium mixed catalyst is between 20:1 and 1:1 (w/w);
- c) said platinum-rhodium mixed catalyst is used in a quantity of 0.1 to 20 wt%, relative to the compound undergoing hydrogenation;
- d) said platinum-rhodium mixed catalyst is adsorbed on a support;
- e) said hydrogenation is performed in the presence of a solvent selected from the group consisting of: water; an alcohol; an ether; and mixtures thereof;
- f) said hydrogenation is performed under a hydrogen pressure of between 1 and 100 bar; and
- g) said hydrogenation is performed at a temperature of 10°C to 150°C.

25 19. (New) A process for the hydrogenation of the aromatic nucleus of a compound, comprising hydrogenating said compound in the presence of a platinum-rhodium mixed catalyst, wherein said compound has the general formula (I):

30



wherein

n can be 0, 1, 2

5 R¹ represents unsubstituted or substituted (C₆-C₁₈) aryl, (C₇-C₁₉) aralkyl, ((C₁-C₈) alkyl)₁₋₃ (C₆-C₁₈) aralkyl ((C₁-C₈) alkyl)₁₋₃ (C₆-C₁₈) aryl, (C₃-C₁₈) heteroaryl, (C₄-C₁₉) heteroaralkyl, ((C₁-C₈) alkyl)₁₋₃ (C₃-C₁₈) heteroaryl,

10 R² denotes H, OH, (C₁-C₈) alkyl, (C₂-C₈) alkoxyalkyl, (C₆-C₁₈) aryl, (C₇-C₁₉) aralkyl, (C₃-C₁₈) heteroaryl, (C₄-C₁₉) heteroaralkyl, ((C₁-C₈) alkyl)₁₋₃ (C₆-C₁₈) aryl, ((C₁-C₈)

15 alkyl)₁₋₃ (C₃-C₁₈) heteroaryl, (C₃-C₈) cycloalkyl, ((C₁-C₈) alkyl)₁₋₃ (C₃-C₈) cycloalkyl, (C₃-C₈) cycloalkyl (C₁-C₈) alkyl;

20 R³ and R⁴ together denote an =O function or H or (C₁-C₈) alkyl, (C₆-C₁₈) aryl,

P¹ and P² mutually independently stand for hydrogen or an amino protective group or together stand for a bifunctional amino protective group,

25 P³ represents hydrogen or a hydroxyl protective group or carboxyl protective group and the C atom marked with * is an asymmetrical C atom.

20. (New) The process of claim 19, wherein said compound
25 is an aromatic amino acid or an aromatic-substituted amino alcohol.

21. (New) The process of claim 20, wherein the ratio of platinum to rhodium in said platinum-rhodium mixed catalyst is between 20:1 and 1:1 (w/w).

22. (New) The process of claim 20, wherein said platinum-rhodium mixed catalyst is used in a quantity

of 0.1 to 20 wt%, relative to the compound undergoing hydrogenation.

23. (New) The process of claim 20, wherein said platinum-rhodium mixed catalyst is adsorbed on a support.

24. (New) The process of claim 20, wherein said hydrogenation is performed in the presence of a solvent selected from the group consisting of: water; an alcohol; an ether; and mixtures thereof.

25. (New) The process of claim 20, wherein said hydrogenation is performed under hydrogen pressures of between 1 and 100 bar.

15 26. (New) The process of claim 20, wherein said hydrogenation is performed at a temperature of 10°C to 150°C.

20 27. (New) The process of claim 20, wherein:

- a) said aromatic compound is an amino acid or aromatic-substituted amino alcohol;
- b) the ratio of platinum to rhodium in said platinum-rhodium mixed catalyst is between 20:1 and 1:1 (w/w);
- c) said platinum-rhodium mixed catalyst is used in a quantity of 0.1 to 20 wt%, relative to the compound undergoing hydrogenation;
- d) said platinum-rhodium mixed catalyst is adsorbed on a support;
- e) said hydrogenation is performed in the presence of a solvent selected from the group consisting of: water; and an alcohol;

- f) said hydrogenation is performed under a hydrogen pressure of between 1 and 100 bar; and
- g) said hydrogenation is performed at a temperature of 10°C to 150°C.